+135-3858-6433 (GuangDong)
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TEKNOR APEX

Monprene® WR-12250 CLR

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Monprene WR-12250 is a high performance clear thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel, including writing instruments. Monprene WR-12250 is a medium hardness, low density, lubricated, non-filled grade that exhibits excellent adhesion to PP and is suited for injection molding.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Good Adhesion • Good Colorability • Good Flexibility • Good Moldability	• Good Toughness • High Flow • Low Density • Low Specific Gravity • Lubricated	• Medium Hardness • Slip • Without Fillers
Uses	• Consumer Applications • Flexible Grips • Handles	• Overmolding • Rubber Replacement • Soft Touch Applications	• Writing Instruments
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Injection Molding	• Multi Injection Molding	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.890		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	20	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2]			ASTM D412
Across Flow : 100% Strain	249	psi	
Flow : 100% Strain	317	psi	
Tensile Stress [2]			ASTM D412
Across Flow : 300% Strain	393	psi	
Flow : 300% Strain	460	psi	
Tensile Strength [2]			ASTM D412
Across Flow : Break	941	psi	
Flow : Break	1110	psi	
Tensile Elongation [2]			ASTM D412
Across Flow : Break	630	%	
Flow : Break	690	%	
Tear Strength [2]			ASTM D624
Across Flow	159	lbf/in	
Flow	167	lbf/in	
Compression Set [3] (73°F, 22 hr)	21	%	ASTM D395B
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	52		
Shore A, 5 sec, Injection Molded	50		

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Processing Information		
Injection	**Nominal Value**	**Unit**
Rear Temperature	360 to 400	°F
Middle Temperature	360 to 400	°F
Front Temperature	360 to 400	°F
Nozzle Temperature	360 to 400	°F
Processing (Melt) Temp	360 to 400	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 800	psi
Injection Rate	Fast	
Back Pressure	25.0 to 100	psi
Screw Speed	50 to 100	rpm
Cushion	0.150 to 1.00	in

Injection Notes

Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C).

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] Die C, 20 in/min

[3] Type 1